



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ERRATA

Page 40, line 21, for 32. var. *implexa* read 31. var. *implexa*.

Page 41, line 31, Thallus pendulous should be dichotomous with thallus erect, line 11.

SHORTER NOTES

Recent American botanical periodicals have contained a number of articles on mosses, hepatics, and lichens indicating considerable research in one line or another among these interesting plants.

NOTES ON THE LIFE-HISTORY OF SPHAGNUM SUBSECUNDUM.—In the Botanical Gazette (January 1915, pp. 40-56) Mr. George S. Bryan has contributed the first of a series of papers on the life history of *Sphagnum subsecundum*. ("The Archegonium of *Sphagnum subsecundum*.") Referring to the impression "in some quarters at least, that *Sphagnum* seldom bears sex organs," Bryan notes that in a careful study of a bog covering about twenty acres near Mineral Springs, Indiana, 40 miles south of Chicago, and also other bogs in that vicinity, the fact was disclosed that "not a single sterile head of *S. subsecundum* could be found. Sex organs were everywhere in vast numbers." . . . "and again in the autumn of 1913 the sex organs appeared in the same vast numbers." It was found that "when the sex organs are approaching maturity both male and female plants have well marked characters. The antheridial heads are decidedly globose and show variations in color from yellow brown to red brown, occasionally almost black. The archegonial heads are less globose, have a somewhat flattened aspect on top, and show no unusual coloring except the conspicuous bud at the growing point in the center of the head. This bud varies in color from a yellow brown to red brown. An analysis of the bud reveals archegonia almost mature on short side branches near the apex of the main axis, the coloring matter being in the perichaetial leaves surrounding the organs." The antheridia began to develop in August, the archegonia in September. In 1913 the oldest archegonia were almost mature on October 25 and about this time the coloring of the perichaetial leaves began to be noticeable. Some archegonia do not become mature before early spring.

The main body of this interesting contribution is given over to the study of the development of the archegonium, Bryan's conclusions being that "The archegonium of *Sphagnum subsecundum* is synthetic. The stalk, the thick venter, and the comparatively slender twisted neck are moss characters; the relatively inactive cover cell, the intercalary growth of the archegonium, and the low number of canal cells [8 or 9] are hepatic characters as we know them today." The paper is illustrated by four plates containing fifty-nine figures and is well worth reading by every bryologist.—O. E. J.

LICHENS DECOMPOSE ROCKS.—Cowles has recently called attention (Botanical Gazette 59: 77. Jan. 1915) to a couple of papers by Bachmann (Ber. Deutsch. Bot. Gesells. 29: 261-273, 1911, and 31: 3-12. 1913) relating to the action of lichens upon their substrata. The micaceous element of granite is quickly decomposed and eventually within a relatively short time the granite is broken down into a claylike substance. In the second paper noted it was

pointed out that calcareous lichens with *Chroolepus* gonidia can dissolve calcium carbonate and that a limestone will thus become perforated in a sponge-like manner by the *Chroolepus* cells.

CONKLIN'S HEPATICAE OF THE DULUTH SUPERIOR DISTRICT.—Under the title of "Preliminary Report on a Collection of Hepaticae from the Duluth-Superior District" (Trans. Wisconsin Acad. Sci., Arts, and Letters 17: 985-1010. Reprint, Oct., 1914) Dr. Geo. H. Conklin, Curator of the S. M. S. Hepatic Herbarium, has published an annotated list of the hepatics found within a radius of about fifty miles from the two towns, Duluth and Superior, at the extreme west end of Lake Superior. The first four pages of this excellent paper are devoted to a good description of the physiography and general geology of the district, while following this is the catalogue of species, eighty-two in all, with many interesting critical notes on their general characteristics and habitats.

THE TWENTIETH ANNIVERSARY OF THE NEW YORK BOTANICAL GARDEN will be commemorated at the Garden during the week commencing September 6, 1915. Botanists from all parts of North America are invited to attend. The program for the week will be a notable one, including reading and discussion of papers, inspection of buildings and grounds, and visits to study the coastal flora of Staten Island, the pine barrens of New Jersey, and the Brooklyn Botanic Garden. Readers of THE BRYOLOGIST should keep this in mind.

The veteran collector and botanist, Dr. John Macoun, is now living at Sidney, Vancouver Island, and is collecting more particularly the thallophytes and bryophytes of that interesting region.

The Editor, accompanied by his wife, is this season taking advantage of the low fares to visit Washington State for a general botanizing and collecting trip. The plan is to spend some time in each of the general floral areas, beginning in the Spokane district about June 20, and reaching the western end of the state about the middle of September. Most of the time will be spent in a tent in more or less out-of-the-way places, but first-class mail will be forwarded either from the regular address at the Carnegie Museum, Pittsburgh, Pa., or from Spokane.

Both the July and September numbers of THE BRYOLOGIST will be late on account of the inability to keep in touch with the mail, and because of distance from headquarters. We would beg the indulgence of our readers for the delay.

EXCHANGE DEPARTMENT

Offerings to S. M. S. members for stamped self-addressed envelope:

Mr. Severin Rapp, 207 First St., Sanford, Florida.—*Lobadium phyllocharis* Merrill, *Lobadium vulpinum* (Tuck.), and *Arthothelium macrothecum* (Fee).

Mr. Chas. C. Plitt, 3933 Lowndes Ave., Baltimore, Maryland.—*Cetraris Oakesiana* Tuck.

Mr. Roy Latham, Orient, Long Island, N. Y.—*Xanthoria parietina* (L.) Th. Fr., *Usnea florida* (L.) Hoffm., and *U. trichodea* Ach., all from Long Island.

Dr. H. E. Hasse, Santa Monica, Cal.—*Opegrapha vulgata* Ach., collected in California.